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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,347	10/02/2000	Dieter Weidhaus	WEIDHAUS ET AL I	3543

7590 07/29/2004

COLLARD & ROE, P.C.
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Roslyn, NY 11576

EXAMINER

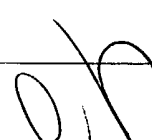
DOROSHENK, ALEXA A

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/677,347	Applicant(s) WEIDHAUS ET AL.	
	Examiner Alexa A. Doroshenk <i>AND</i>	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/25/01</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-8, in the reply filed on May 28, 2004 is acknowledged. The traversal is on the ground(s) that the subject matter of the claims is sufficiently related that the search and examination of the entire application could be made without serious burden. This is not found persuasive because establishing that the inventions are classified in different classes and/or subclasses establishes that a serious burden exists on the examiner if restriction is not required.

The requirement is still deemed proper and is therefore made FINAL.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al. (5,382,412).

Kim et al. discloses an apparatus comprising:

a pressure-supporting enclosure (2);

an inner reactor tube (1) within said enclosure (2) and made from a material which exhibits high transmission for thermal radiation;

an inlet (30) at a top of said enclosure (2) for silicon particles (5);

an inlet device (9 & 13) for supplying a reaction gas which contains a supplying a reaction gas silicon compound in gas or vapor form, the inlet device (6) being of tubular (see figure 4) design and dividing the fluidized bed into a heating zone (10) and a reaction zone (above 10) situated above the heating zone;

a gas-distribution device (8) at a bottom of said enclosure (2) for feeding a fluidizing gas into the heating zone;

an outlet (29) at the top of said enclosure for reaction gas which has not fully reacted, fluidizing gas and products of reaction which are in gas or vapor form and collect above a fluidized-bed surface (19);

an outlet (20) at the bottom of said enclosure (2) for a product (33

a heater device and an energy supply and for the heater device (23); and

wherein the heater device (23) is a radiation source for thermal radiation which is arranged outside the inner reactor tube and as a cylinder around the heating zone (10), without being in direct contact with the inner reactor tube, and is designed in such a

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manner that it uses thermal radiation to heat the silicon particles in the heating zone to a temperature which is such that the reaction temperature is established in the reaction zone (see figure 1-4).

With respect to claim 2, Kim et al. disclose wherein a between the reaction tube (1) and enclosure (2) is provided with thermal insulation (27a).

With respect to claim 3, Kim et al. discloses wherein the radiation source formed is cylindrical (col. 7, lines 38-57).

Claims 4 and 5 continue to read on the device of Kim et al. since no additional structural elements have been recited in the claims. An apparatus claim covers what a device is, not what a device does. MPEP 2114.

With respect to claim 6, Kim et al. disclose wherein the heater device is a quartz tube (col. 6, lines 57-60).

With respect to claim 8, Kim et al. disclose wherein the components of the reactor which come into contact with the product are of inert materials (col. 6, lines 57-60 and col. 9, lines 59-62).

Allowable Subject Matter

5. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: The prior art neither teaches nor suggests a fluidized-bed reactor, substantially

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as claimed in claim 1, wherein the heater device is a slotted tube made of graphite with a SiC coating arranged in the reactor standing on or hanging from electrode terminals.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa A. Doroshenk whose telephone number is 571-272-1446. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Alexa A. Doroshenk
Examiner
Art Unit 1764